

IAN'S CHALLENGE

It's time that LAW took over bad decisions. I lost my son seventy-five days ago because laws were not intact on this carbon monoxide detection device issue. The decision not to go out to the guest house and check on the Jacuzzi furnace, because my son mentioned to my wife and I,

"That he knew more about the operation of the said unit than I", cost him his life. YES! He did know more about the operation of the unit but he did not know the dangers of carbon monoxide poisoning. "That simple lack of communication has deprived us all of a special young man". To tell you a little bit about Ian is to inform you of a tragic loss of a son that excelled in High School, touched many lives and would had done a great deal of winning on the golf course. Ian was a vital part of the Flathead High School golf team and his senior year would have been outstanding. "Now I would say, no matter what his scores.

We lost our son because we were not properly informed about the type of unit that was installed in our home. We lost our son because we were not informed of the precautions that should have been taken in such an event of the release of carbon monoxide. We lost our son seventy-five days ago because there were not LAWS protecting him. "I have to ask, why these laws are only passed after so many people die due to the lack of such laws"?

I propose this issue to be of the utmost importance! My son Ian Hineman cannot die this close to a decision being made to prevent others the same fate. Do not wait until someone in your family falls victim to this silent killer. MONTANA, as well as other states that do not have carbon monoxide detection laws, must enact

procedures to protect the people and prevent these types of losses.

Who can emphasize more,"the urgency", than Ian and our family?

This is Montana's chance to let Ian's death wake everyone up to what's being told to us all. WITHOUT CARBON MONOXIDE DETECTION LAWS WE ASK FOR MORE OF THE SAME,"FAMILY AND LOVED ONE DEATHS." We can now make a change by addressing and strengthening Senate Bill 161 on carbon monoxide.

My proposals are state wide MANDATORY carbon monoxide detection device laws. Laws similar to Nicole's Law in Massachusetts will save many lives across the nation. This law requires all homes be equipped with carbon monoxide detectors before being sold.

I respectfully submit that Senate Bill 161 on carbon monoxide issues be named "Ian's Challenge" A challenge to save lives throughout Montana.

Ian's Challenge



Ian Scott Hineman was a healthy, fun loving 17 year old young man who loved golf, skiing and his friends and family. He was a junior at Flathead High School and a valuable member of the FHS Golf team.

Ian Hineman

October 31, 1991
December 21, 2008

We lost Ian due to Carbon Monoxide poisoning as he slept. It was a tragic accident that no one would have predicted.

The family and friends of Ian Hineman challenge you to make sure you have a Carbon Monoxide Detector properly installed in your home to protect your family.

We have started **Ian's Challenge** in cooperation with local vendors listed below. Take this flyer to any of the stores below and you will receive a 10 percent discount to purchase a Carbon Monoxide Detector... accepting Ian's challenge.

Contact number 885-5772 (expires 3/31/09)

Limit three per household.



For information about Carbon Monoxide Safety logon on to:

www.cosafety.org

In Memory of Ian

By Constance See
Photos provided by
the Hineman family of Creston

It is said there is no greater loss than that of a child. Seventeen-year-old Ian Hineman's death shook his family and the greater community to the core. It happened so fast. The silent villain was a common odorless gas – carbon monoxide (CO).

An active, outgoing teenager, Ian loved downhill skiing, going to the movies and shooting pool. His favorite pastime was golf. Ian started playing golf very young and was a lettered member of the Flathead High School Golf Team in his sophomore and junior year. His future looked bright, not a cloud in the sky until Sunday, Dec. 21, 2008.

A good son, Ian enjoyed helping out around the family's large Creston home and nearby guesthouse. Following a week of subzero temperatures, Ian walked over to the guesthouse to check out the pipes and make sure they didn't freeze. He plugged up the venting duct to the furnace on the Jacuzzi and decided to spend the night.

"The next morning when I woke up and I looked toward the other house I saw exhaust fumes," Ian's father Scotty Hineman said. "I ran over there and downstairs to the basement. Ian was lying there. He wasn't breathing. I called 9-1-1 and tried to revive him, but I didn't realize I was inside a gas bomb. I felt dizzy and blacked out. The fire department was there in less than 20 minutes. If they had taken 40 minutes, I might not have made it out alive."

Wearing hazardous materials suits with self-contained breathing equipment, Creston firefighters pulled Ian and Scotty out of the house. Levels of carbon monoxide in the house were so dangerous they were higher than the monitoring equipment could register.

Ian was taken to Kalispell Regional Medical Center where he was pronounced dead from accidental poisoning. Scott was hospitalized and released later. After affects of Scotty's contact with carbon monoxide include loss of equilibrium, memory loss and difficulty focusing. Physicians don't know yet if there will be any permanent physical damage from Scotty's poisoning.

"With fire you can see smoke, feel heat, but with gas there's nothing," Scotty said. "That furnace was installed in my home without proper knowledge of how to protect my family from its dangers. There needs to be governmental safeguards for installations of any equipment that can cause death. I believe there should be a detector anywhere a fuel-burning carbon monoxide producing unit. Look around my store (the Hinemans



own Oriental Secrets, an Asian rug gallery in Whitefish). I can't put in nine-foot ceilings to display 8 X 10 rugs because I need to have this smoke detector sprinkler system in the ceiling. There needs to be a similar law for carbon monoxide monitors."

Robyn Balcom and her daughter Celeste are friends of the Hinemans. Ian's sudden death hit the Balcoms deeply as well. The tragedy has inspired Robyn and the Hinemans to take action.

"Celeste was supposed to go out with Ian that day, but she got a text message telling her what had happened, and we ended up at the hospital," Robyn said. "Ian often had four or five boys spending the night there. More young people could have died."

The Monday following Ian's death, Robyn met with the Kalispell fire chief and went online to study carbon monoxide. The information she gathered about how many people are exposed to it was staggering. Robyn felt motivated to help the Hinemans use this tragedy to help prevent another life from being taken.

She put together a flyer explaining what had happened to Ian and warning people about the dangers of the gas. Robyn then asked local hardware stores to help support an awareness campaign to get more carbon monoxide monitors out to the public.

"I was deeply touched with how receptive our community was," Robyn said. "Anyone I asked to help said, 'Yes.'"

Robyn and the Hinemans have created Ian's Challenge, challenging everyone to have a carbon monoxide monitor properly installed in their business and home. Several local hardware stores are offering a 10 percent discount on monitors through March 31 in honor of Ian. Participating stores include Lowe's, Western Building Center, Home Depot and Cardinal True Value. Just mention Ian's Challenge to get your discount. There are a wide variety of CO detectors. They range in price from \$20 to more than \$300.

"Carbon monoxide alarms have been determined to be the most effective way to detect carbon monoxide and there is a dramatic correlation between carbon monoxide alarm ordinances in cities and lower death rates from carbon monoxide," said Kathryn Gallagher, a communications manager for Home Depot's western division. "This winter our Home Depot stores in Montana, specifically Kalispell have seen an increase in sales as customer become aware of the importance of being protected. At one point around Christmas time we were sold out of the basic alarms for a short time and worked rapidly to replenish the supply to meet the strong demand."

Flyers explaining Ian's Challenge and the dangers of carbon monoxide were handed out at Ian's memorial service on December 27 at Flathead High School's auditorium. The auditorium was filled with people whose lives Ian had touched.

A lack of public education regarding carbon monoxide is a nationwide problem according to Bob Dwyer, an expert in the field. Dwyer lives in Kalispell and travels the nation teaching about carbon monoxide. After Ian's death Dwyer spoke to 20 local fire chiefs and their staff.

"I asked them how much CO is too much, and when do you want to take people out of their homes," Dwyer said. "They all had different answers. One fire chief asked me if wood smoke was bad. That is the dumbest question I've ever been asked by a public official responsible for a community. The most progressive group was the Creston Fire Department. They understand."

Carbon monoxide poisoning sends 20,000 people a year into emergency rooms and kills about 500 annually according to MSNBC. Dwyer thinks the real figure is larger, because some causes of death are misdiagnosed. The medical examiners in Lake Powell and Lake Havasu began to autopsy drowning victims in the summertime and found often the victims were poisoned with carbon monoxide by hanging onto the open end of a boat near the exhaust. They were poisoned before they drowned.



Left to right: Ian Hineman, his father Scott, his mother Jane and brother Ben.

Symptoms of CO poisoning can include headaches, dizziness, rapid heart rate, weakness, nausea, blurry vision, loss of hearing, disorientation, respiratory failure, seizures and/or coma. There is at least one physician in the Flathead Valley who has a breath-analyzer to measure CO levels inside the body. He's general practitioner Dr. Dennis Winkel at 1250 Burns Way in Kalispell.

Dwyer found what he believes is a connection between CO poisoning and several illnesses including dementia, respiratory ailments like asthma, allergies, multiple sclerosis and heart problems.

In one instance, Dwyer met a woman in Kalispell named Debbie who was told by her physician that she had congestive heart failure. He gave her three months to live. She chose to spend her last months in her home. The more she stayed in her house, the worse she got. Dwyer was coincidentally conducting an energy audit at her home when he discovered elevated levels of CO. He fixed the problem. Debbie was put on oxygen and recovered to live another seven years.

"Most heating contractors don't examine your furnace," he said. "A forced air electric furnace with a gas water heater could reverse."

Another time Dwyer met a woman who had just been tested for multiple sclerosis. She was terribly weak and had uncontrollable nausea through the winter, but felt better in spring and summer. Her husband's health was great. Dwyer tested the appliances and discovered a connection between illness and the days she did the

laundry, another carbon monoxide link.

"Start counting bedrooms above garages, a bad idea," Dwyer said. "People think it's OK to keep their car running in the garage if the door is open, but CO can be pulled into the house. I can talk and talk, but until there's a tragedy, change doesn't happen."

Montana State Representatives Debby Barrett (R) of Dillon and Cheryl Steenson (D) of Kalispell are working on a bill that would take the first step. Senate Bill 161 would require landlords to provide CO monitors for renters. On Jan. 24, 2009 the bill passed the Montana Senate and was transmitted to the House.

"Carbon monoxide poisoning affects not only people in Montana but across the nation," Steenson said. "It has gone far too long for us not to have legislation to protect people from it, especially kids."

Scotty said he hopes Montana will someday become the 16th state in the nation to have legislation protecting the public from CO poisoning, so no one else will have to go through the grief he and his family are processing now.

"Everywhere I look at home there's something that reminds me of Ian – photos of him, his golf clubs, his stuff," Scotty said. "There's a light in Ian's room that I never turn off now. Ian would want me to fight to protect other people."

Ian died too young, but his light will live on. Perhaps one day Montana will adopt legislation in honor of Ian to help save others from a similar fate.

For more information about carbon monoxide go to www.cosafety.org.

Poisoning from carbon monoxide (CO) can go undetected though a person might be experiencing symptoms everyday. We are not all of equal health so it is vital we all have gainful knowledge about the health effects and the symptoms of CO poisoning. This booklet contains general information specific to the sources of carbon monoxide, how it is generated and how it gets to us.

You may be exposed to Carbon Monoxide when you leave your car, truck or van running in a garage; or, when you burn charcoal, alcohol or gasoline in an enclosed tent, camper or room.



You may also be exposed to CO when there is cigar, cigarette or pipe tobacco smoke and brush or forest fires. Your home or building may contain malfunctioning oil, gas or wood furnaces, water heaters, space heaters, cooking systems or fireplaces that are already producing large amounts of CO.

You may also be exposed to CO on a boat, on a bus, in a car, in a house, on a street, at a construction site, almost everywhere; be careful!

The misuse of gasoline powered electric generators is resulting in the death & injury to people at work and during power outages. Use them cautiously, safely and far away from buildings, campers & your air. Never use outdoor barbecue's inside. Never use gas or gasoline powered tools inside.

CO Safety Is Everybody's Business!

There are approximately 50,000 Emergency Room visits for CO poisoning in the USA annually. More and more states and communities are requiring carbon monoxide alarms in living quarters, including motels.

**The choice of alarms, detectors and monitors may be a matter of life or death.
Your awareness is a matter of life or death!**

What can I do to protect myself and my family? Use non-electrical space heaters only in well ventilated areas. It is highly recommended that unvented combustion systems be used with caution and with CO monitors and perhaps CO₂ (carbon dioxide) monitors to ensure healthy air. **Don't start** and leave running cars, generators, trucks, or other vehicles in an enclosed area. Even if large garage door is open it can still be dangerous. CO can get into rooms above! Keep generators far away from windows, doors and other entries into buildings.

Every home should have at least one carbon monoxide detector that is more sensitive to the health needs of vulnerable populations. It is very important to know that CO Alarms Listed by the UL 2034 Standards may not be the best for some people of vulnerable health.

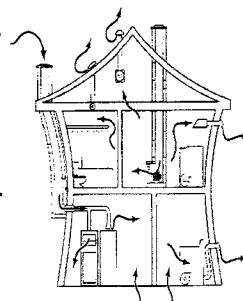


Have your furnace and other fuel burning appliances tested and inspected by a qualified professional once a year or before each heating season to each manufacturer's measurable standards found in the instructions. **You should receive a measurement report verifying what tests were taken and the results.**

Make sure your service professional tests each appliance using a testing instrument that can detect carbon monoxide or analyze the combustion gases. **Today's HVAC technician** should also be able to measure building and duct pressures; this information may aid in the prevention of combustion system failure and CO generation. **Don't wait until symptoms occur or until something breaks! BE SAFE!**

Buildings operate like chimneys. Warmer, less dense air rises in the structure. Air leaks out of the holes near the top of the structure (exfiltration) and leaks into the holes near the bottom of the structure (infiltration). This driving force is sufficient to back-draft combustion equipment and distribute combustion gases.

When exhaust fans (bathroom, kitchen, clothes dryer, attic fans) **operate** they may exceed some gas, oil or wood furnace or water heater's draft pressure and result in combustion gas dispersion and perhaps carbon monoxide exposures & poisoning inside the home or building. Have your home pressure tested when your appliances are tested.



Recognizing Symptoms of CO Poisoning

Every technician entering a building should recognize health symptoms associated with carbon monoxide exposures. They should also be aware that if they are not monitoring the CO levels, their own safety may be in jeopardy or within a building without protection!



A Few Buildings Where CO Poisoning Occurs!

Every day of the year carbon monoxide news reports from around the world underline the prevalence and common occurrences of accidental poisonings. Often these deaths and illnesses could have been prevented if the people affected were more aware or better educated in the realities of this deadly gas. Perhaps if the building had a carbon monoxide alarm the injury could have been avoided.

Health effects of carbon monoxide; Long-term Exposure: The health effects of CO are related to the concentration and length of exposure. New studies indicate that chronic, low level exposure can have serious health consequences and may be misdiagnosed.

What are the symptoms of CO poisoning?

Carbon monoxide poisoning mimics many common illnesses, such as the flu and food poisoning. The following is a list of common symptoms.

- headaches • loss of hearing • dizziness • depression
- blurry vision • nausea • seizures • disorientation
- respiratory failure • weakness • vomiting • coma
- cardiac arrest • rapid heartbeat • painful discomfort
- loss of consciousness • consult with your physician!

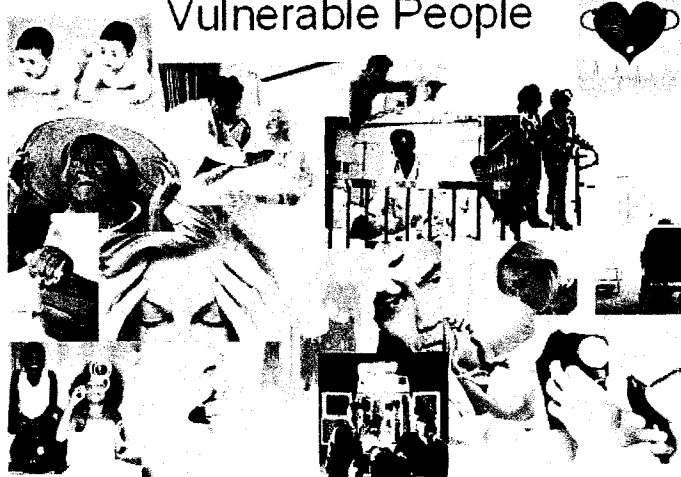
This list is not meant to serve as a diagnosis of carbon monoxide poisoning. It is meant to provide general information on poisoning symptoms. **Non-Invasive testing** is quick, painless and accurate; as simple as testing the end of your finger. Ask your doctor.



How much CO is too much? The health effects can vary significantly due to age, sex, weight, overall state of health. CO is measured in Parts per Million or PPM; out of a million molecules of air, how many are carbon monoxide.

12,000 PPM	Death within 1 – 3 minutes
1,600 PPM	Nausea within 20 minutes, death within 1 hour
800 PPM	Nausea and convulsions – death within 2 hours
400 PPM	Frontal headaches within 1-2 hours; life threatening within 3 hours; UL 2034 alarms should sound within 15 minutes.
200 PPM	NIOSH (National Institute for Occupational Safety & Health Administration) A worker will not be exposed to more than this amount.
150 PPM	UL 2034 Listed alarms must respond within a range of 10 to 50 minutes if this concentration or higher is present.
70 PPM	If CO at this level for 4 hours, UL 2034 alarm should be sounding.
50 PPM	Maximum average level for continuous exposure in an 8 hour workday per federal law.
35 PPM	8 hour exposure TWA; NIOSHA (National Institute of Occupational Safety and Health Administration) of the CDC (Center for Disease Control).
10-35 PPM	Marginal - Small children, elderly, and those suffering respiratory or heart problems are cautioned if these are chronic exposure concentrations. May increase heart stresses.
25 PPM	8 hour TWA limit; ACGIH (American Conference Of Governmental Industrial Hygienists)
9 PPM	This concentration is often measured around busy city streets & intersections.
1-9 PPM	It may be difficult to avoid those often occurring spikes in transient or chronic CO levels without life-style changes.

Vulnerable People



WHO IS RESPONSIBLE FOR THE AIR YOU BREATHE?

How does Carbon Monoxide harm you?

Quite simply, carbon monoxide prevents oxygen from being used by your body. If harmful amounts of carbon monoxide is in the air you breathe it displaces the oxygen you also breathe in. This displacement of oxygen in your blood is poisonous and can cause heart stresses in compensation for the loss. CO can also harm your central nervous system. When carbon monoxide is inhaled into the lungs and bonds with hemoglobin in blood, it forms *Carboxyhemoglobin (COHb)*. This displacement of oxygen in the blood stream affects all major organs and muscles.

Carbon monoxide (CO) detectors can help alert you to increased levels of carbon monoxide in your home, but they are not foolproof and you're not always home! What about the other buildings? Who is responsible for the air you breathe?

CALL A PROFESSIONAL! CALL A CO CERTIFIED TECHNICIAN! BE ONE!

Carbon Monoxide Alarms!

Even though carbon monoxide alarms may meet the U.L. 2034 listing standard they are not all equal in sensor quality or performance. Acid based electrochemical sensors have the highest degree of performance and accuracy. Households should have at least one of these in place if they choose to install one for their personal, family or visitor safety.

U.L. 2034 standards do not require alarming to levels less than 70 parts per million of carbon monoxide.

PLEASE READ THE INSTRUCTIONS AND INFORMATION ON EACH PACKAGE WHEN PURCHASING.

They do not meet OSHA workplace compliance standards. If the concentration in the air is over 70 PPM and under 150 PPM of CO the device is supposed to alarm between 60 and 240 minutes. If the concentration drops below 70 PPM within that period the time starts over again. The test button only lets you know that when you depress it and the audible sound is heard that the electrical connection to the alarm works **NOT that the sensor works.**

Specifically written on the outside of the package it states:

At 70 PPM, unit must alarm within 60-240 min.

At 150 PPM, unit must alarm within 10-50 min.

At 400 PPM, unit must alarm within 4-15 min.

An additional small print WARNING suggests that people of vulnerable health should use a more sensitive and accurate alarm.

COSA describes these people to include: Pregnant women, infants and people with heart or respiratory complications, chronic depression or similar symptoms described in this brochure.

Ask your medical physician or practitioner to test you for carbon monoxide if you think you may have been exposed or have symptoms associated with the poisoning.

COSA is fortunate to have the opportunities to work with manufacturers of test instruments and warning devices, HVAC business owners and their technicians, fuel suppliers, home inspectors and energy auditors, furnace and appliance manufacturers, emergency responders and health technicians, building managers and consumers. **COSA** instructors conduct technical seminars and work with all services and communities to better understand carbon monoxide and the prevention of poisoning through preventative practices.

The logo for the Carbon Monoxide Safety Association (COSA) features the word "COSA" in a large, bold, sans-serif font. The letters are black and have a slightly distressed or hand-painted appearance.

Carbon Monoxide Safety Association

Visit www.cosafety.org for more information about this Not-for-Profit Organization.

Bob Dwyer, Director of Training; 877-546-3726:

Erik Rasmussen, Director International Instruction; 806-408-8122

Ken Kimball, Director of Operations; 866-395-6055

Safety Through Awareness, Training and Testing

Supporting the following organization in their efforts of carbon monoxide safety!

"Ian's Challenge"

*Protect your family
from Carbon Monoxide Poisoning.*